ABSTRACT

In the case of an engine automatic stop and start system in which an engine is stopped while a vehicle is stopped and the engine is started when the vehicle is started, it is necessary to shorten an engine starting time when a driver desires to move the vehicle. Further, it is desirable to efficiently compensate the electric power consumed by the starter. The vehicle contains an existing low voltage power source and a high voltage power source with an excellent charging efficiency. When the engine switches from a running condition to a stopped condition while the vehicle is stopped, a change-over switch switches and applies the voltage of the high voltage power source to a starter motor. This causes the starter motor to rotate at high speeds, thereby starting the engine very quickly. Therefore, it is possible to reduce overall energy losses and improve vehicle fuel consumption.